



June 16, 2017

### Public Health Preparedness and Situational Awareness Report: #2017:23 Reporting for the week ending 6/10/17 (MMWR Week #23)

#### **CURRENT HOMELAND SECURITY THREAT LEVELS**

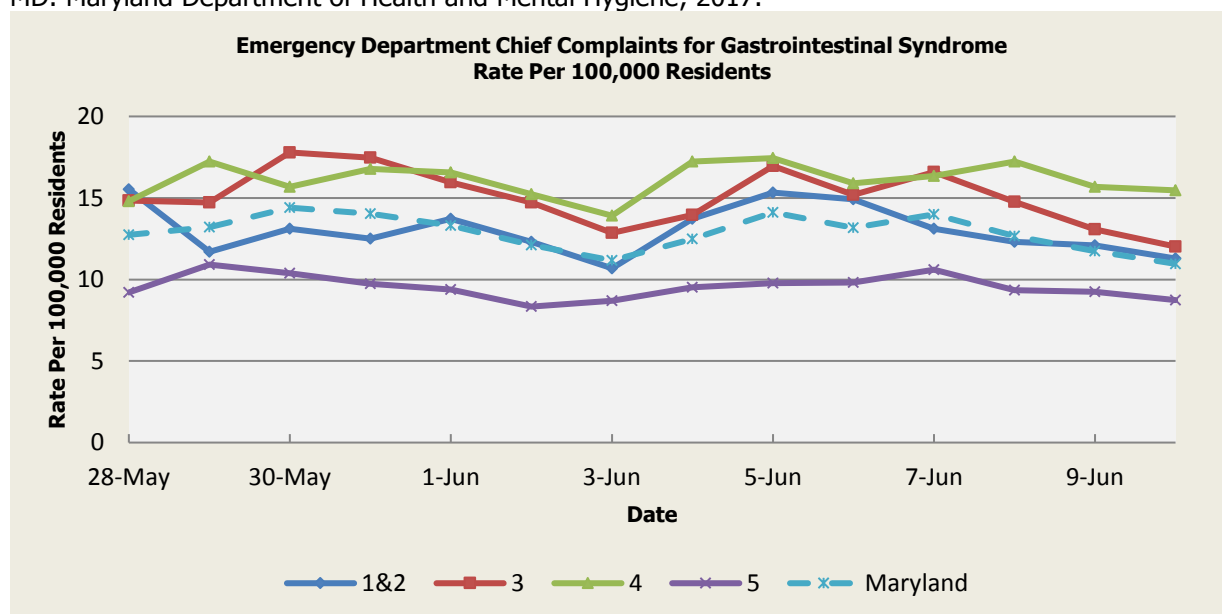
**National:** No Active Alerts

**Maryland:** Level Four (MEMA status)

#### **SYNDROMIC SURVEILLANCE REPORTS**

##### **ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

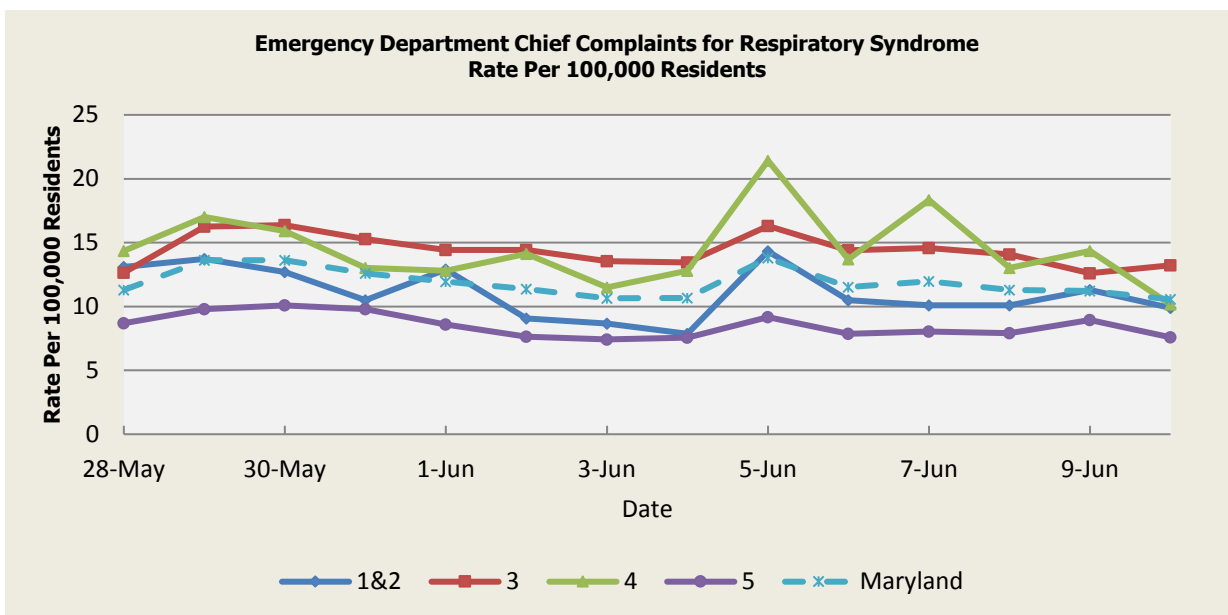
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health and Mental Hygiene; 2017.



There was one (1) Gastrointestinal Syndrome outbreak reported this week: one (1) outbreak of Gastroenteritis in a Nursing Home (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.06	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

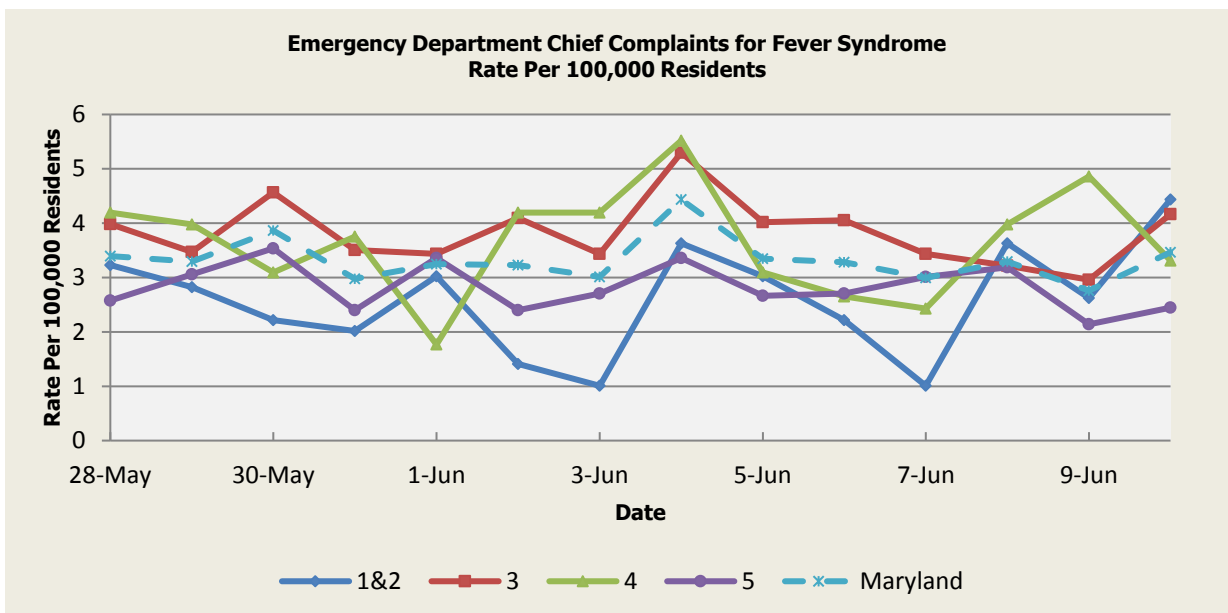
\* Per 100,000 Residents



There were two (2) Respiratory Syndrome outbreaks reported this week: one (1) outbreak of Pneumonia in a Nursing Home (Regions 1&2); one (1) outbreak of Pneumonia in an Assisted Living Facility (Region 3).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.87	14.23	14.13	9.81	12.33
Median Rate*	11.70	13.88	13.91	9.65	12.05

\* Per 100,000 Residents

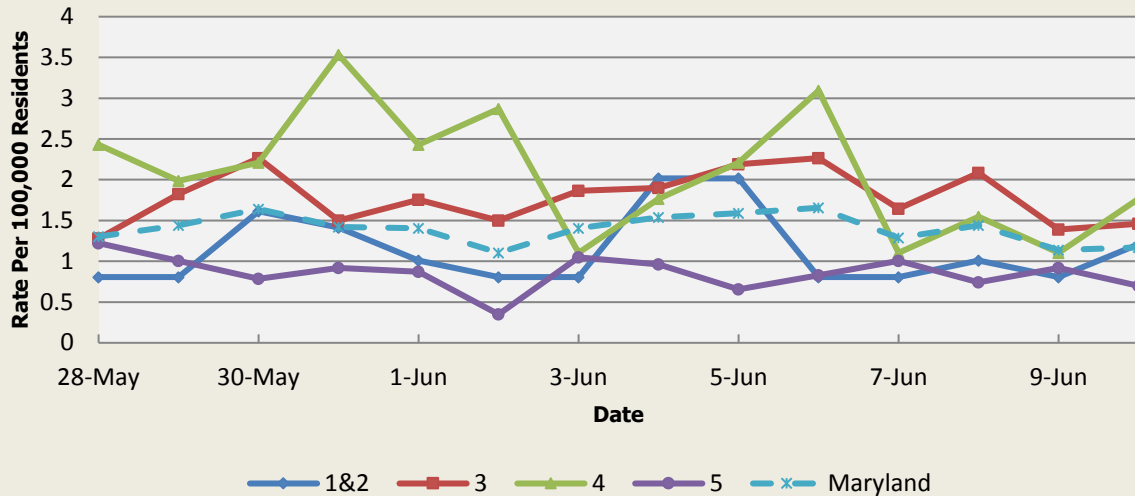


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.98	3.81	3.92	3.03	3.45
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

### Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



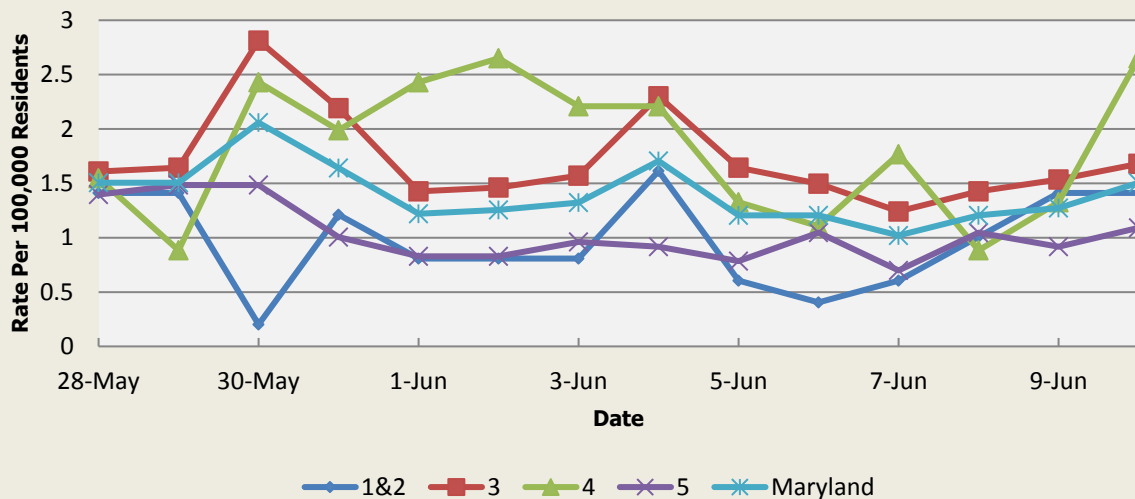
There were no Localized Lesion Syndrome outbreaks reported this week.

#### Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.03	1.86	1.99	0.95	1.45
Median Rate*	1.01	1.83	1.99	0.92	1.42

\* Per 100,000 Residents

### Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents



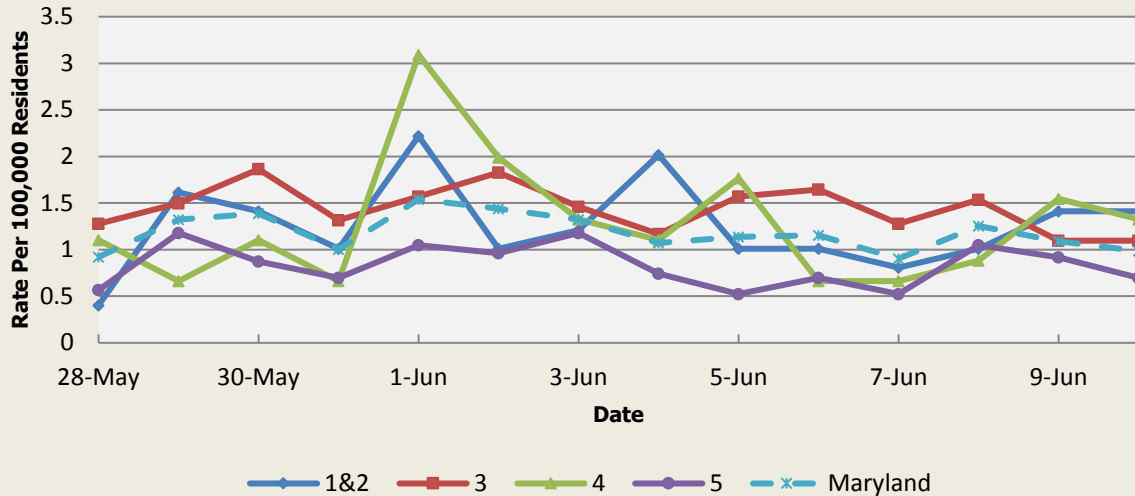
There was one (1) Rash Syndrome outbreak reported this week: one (1) outbreak of Hand, Foot, and Mouth Disease associated with a Daycare Center (Region 4).

#### Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.23	1.73	1.74	1.01	1.41
Median Rate*	1.21	1.68	1.77	1.00	1.39

\* Per 100,000 Residents

### Emergency Department Chief Complaints for Neurological Syndrome Rate Per 100,000 Residents



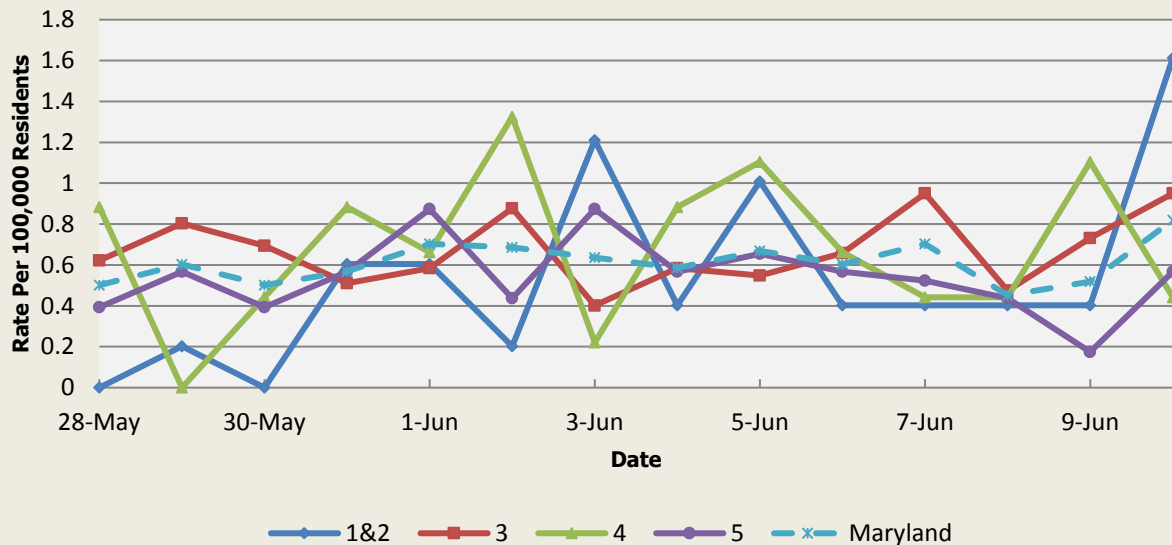
There were no Neurological Syndrome outbreaks reported this week.

#### Neurological Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.64	0.78	0.68	0.50	0.66
Median Rate*	0.60	0.69	0.66	0.48	0.59

\* Per 100,000 Residents

### Emergency Department Chief Complaints for Severe Illness or Death Syndrome Rate Per 100,000 Residents



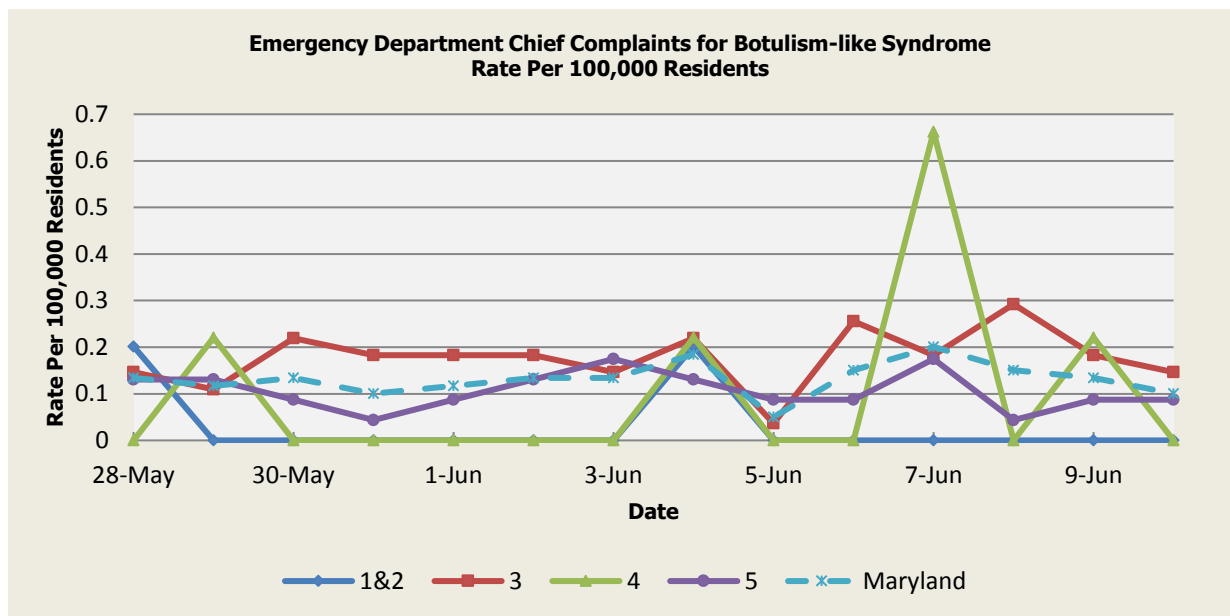
There were no Severe Illness or Death Syndrome outbreaks reported this week.

#### Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.64	0.91	0.79	0.45	0.70
Median Rate*	0.60	0.91	0.66	0.44	0.70

\* Per 100,000 Residents

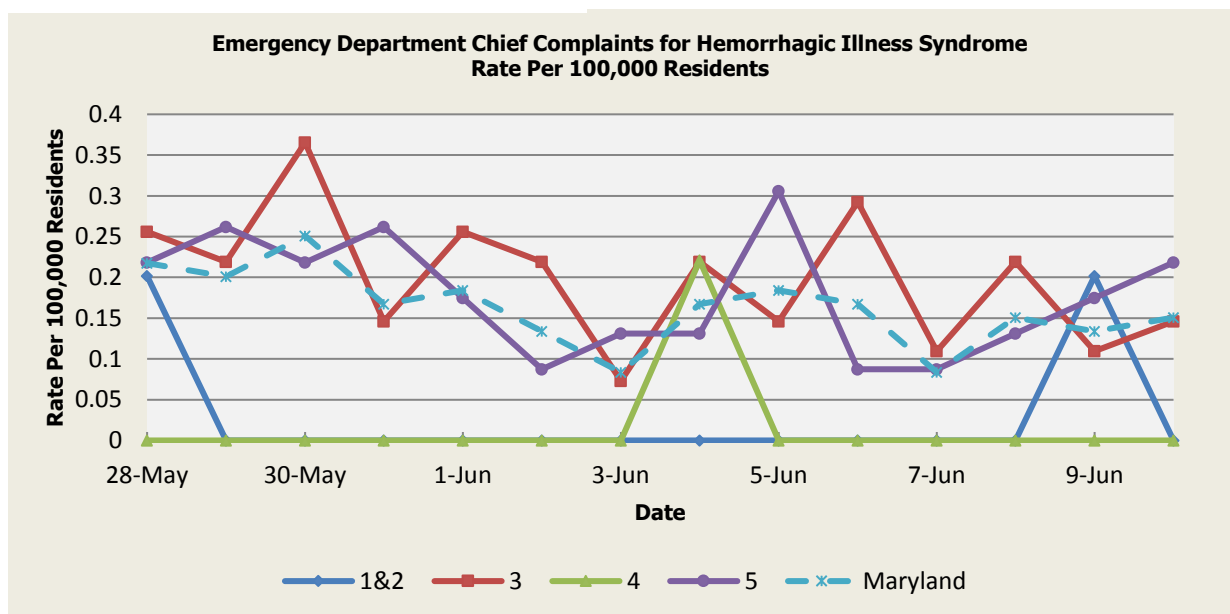
## SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 05/28 (Regions 1&2,5), 05/29 (Regions 4,5), 05/30 (Region 3), 05/31 (Region 3), 06/01 (Region 3), 06/02 (Regions 3,5), 06/03 (Region 5), 06/04 (Regions 1&2,3,4,5), 06/06 (Region 3), 06/07 (Regions 3,4,5), 06/08 (Region 3), 06/09 (Regions 3,4). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.06	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

\* Per 100,000 Residents

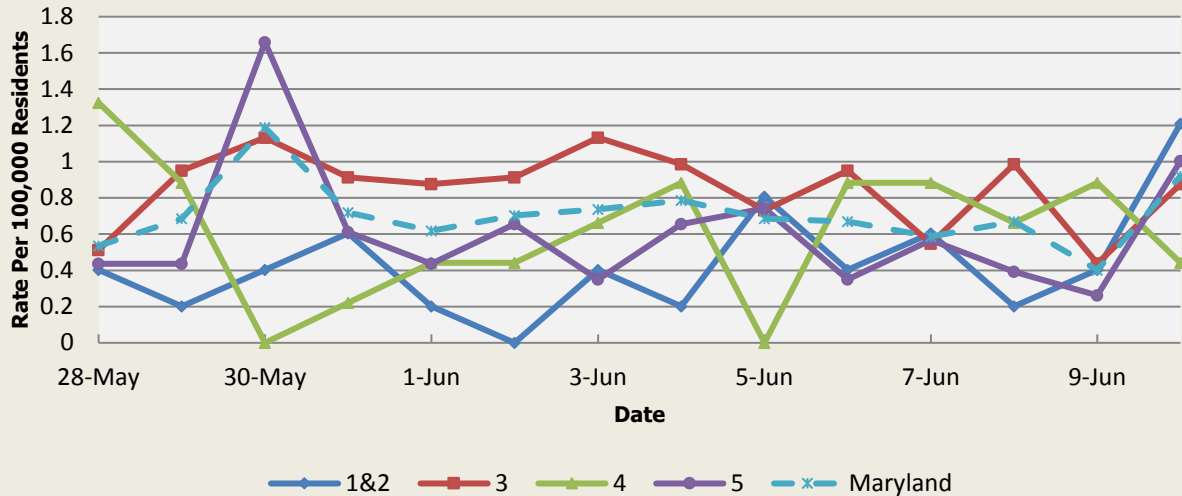


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 05/28 (Regions 1&2,5), 05/29 (Region 5), 05/30 (Regions 3,5), 05/31 (Region 5), 06/04 (Region 4), 06/05 (Region 5), 06/06 (Region 3), 06/09 (Regions 1&2), 06/10 (Region 5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.13	0.03	0.09	0.10
Median Rate*	0.00	0.04	0.00	0.04	0.05

\* Per 100,000 Residents

**Emergency Department Chief Complaints for Lymphadenitis Syndrome  
Rate Per 100,000 Residents**



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 05/29 (Region 4), 05/30 (Regions 3,5), 06/02 (Region 5), 06/03 (Region 3), 06/04 (Region 5), 06/05 (Regions 1&2,3), 06/06 (Region 4), 06/07 (Region 4), 06/09 (Region 4), 06/10 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

**Lymphadenitis Syndrome Baseline Data  
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.52	0.34	0.31	0.41
Median Rate*	0.20	0.40	0.22	0.26	0.33

\* Per 100,000 Residents

**MARYLAND REPORTABLE DISEASE SURVEILLANCE**

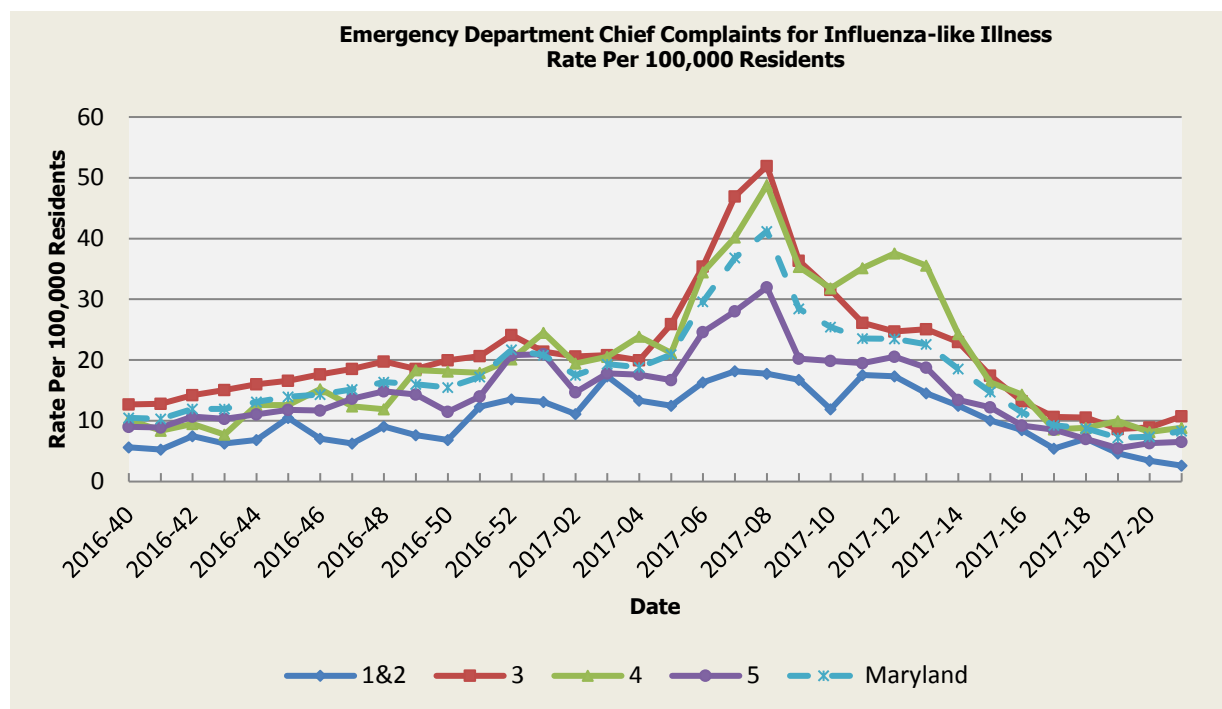
Condition	Counts of Reported Cases†					
	June			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Aseptic meningitis	5	10	9	113	162	154
Meningococcal disease	0	0	0	2	3	2
Measles	0	0.4	0	3	3.6	3
Mumps	2	1	1	19	32.2	11
Rubella	0	0.2	0	1	2.8	3
Pertussis	2	7.8	6	92	132.2	122
Foodborne Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Salmonellosis	25	33.6	28	261	308.6	294
Shigellosis	8	7.4	7	98	86.4	100
Campylobacteriosis	18	29.2	31	282	288.6	282
Shiga toxin-producing Escherichia coli (STEC)	2	6.6	7	59	56.6	54
Listeriosis	0	0.8	1	10	4.6	5
Arboviral Diseases	2017	Mean*	Median*	2017	Mean*	Median*
West Nile Fever	0	0.8	0	0	1.8	2
Lyme Disease	96	168.2	180	1066	1006.6	908
Emerging Infectious Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Chikungunya	0	0	0	0	1.6	0
Dengue Fever	0	0.8	0	6	11	8
Zika Virus***	0	0.4	0	1	5	4
Other	2017	Mean*	Median*	2017	Mean*	Median*
Legionellosis	8	5.6	4	89	58.4	57

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health and Mental Hygiene; 2017. † Counts are subject to change \*Timeframe of 2011-2017\*\*Includes January through current month.

\*\*\* As of June 15, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 31.

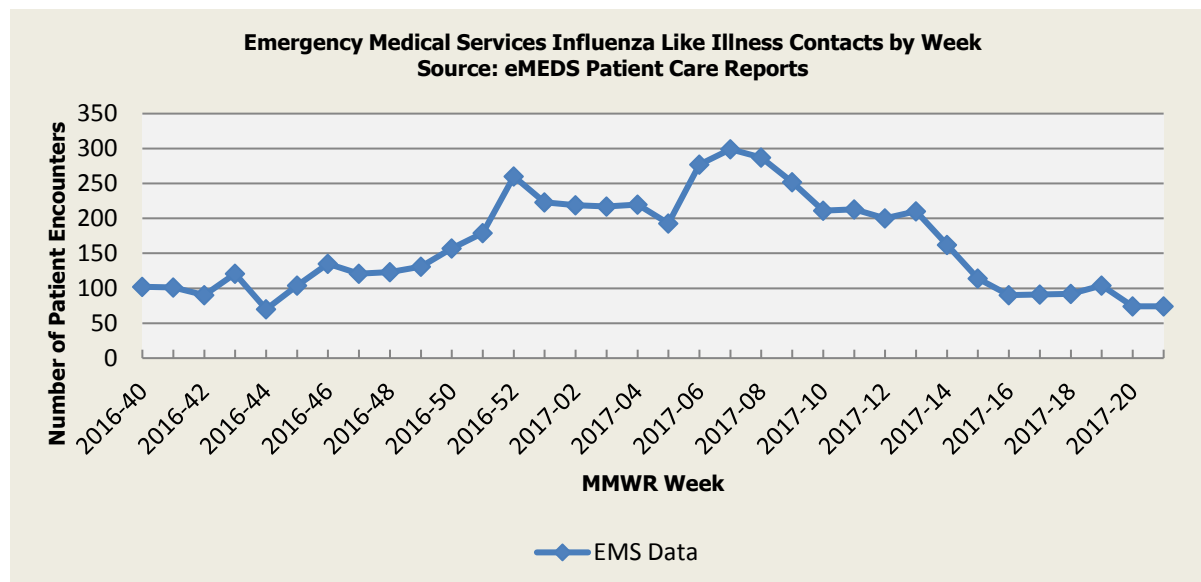
## SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).



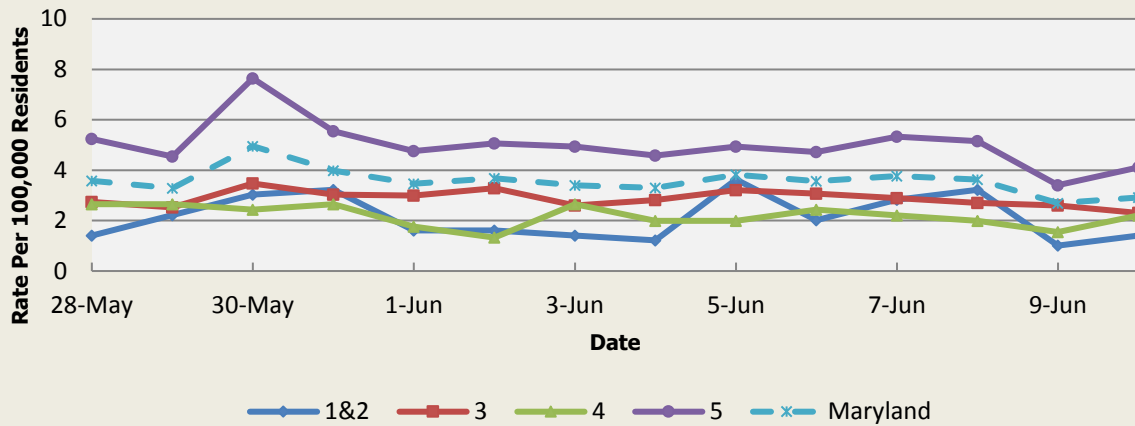
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	167.70	223.96	205.49	194.23	206.50
Median Rate*	7.66	9.63	9.05	8.51	9.00

\* Per 100,000 Residents



**Disclaimer on eMEDS flu related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

### Over-the-Counter Medication Sales Related to Influenza Rate Per 100,000 Residents

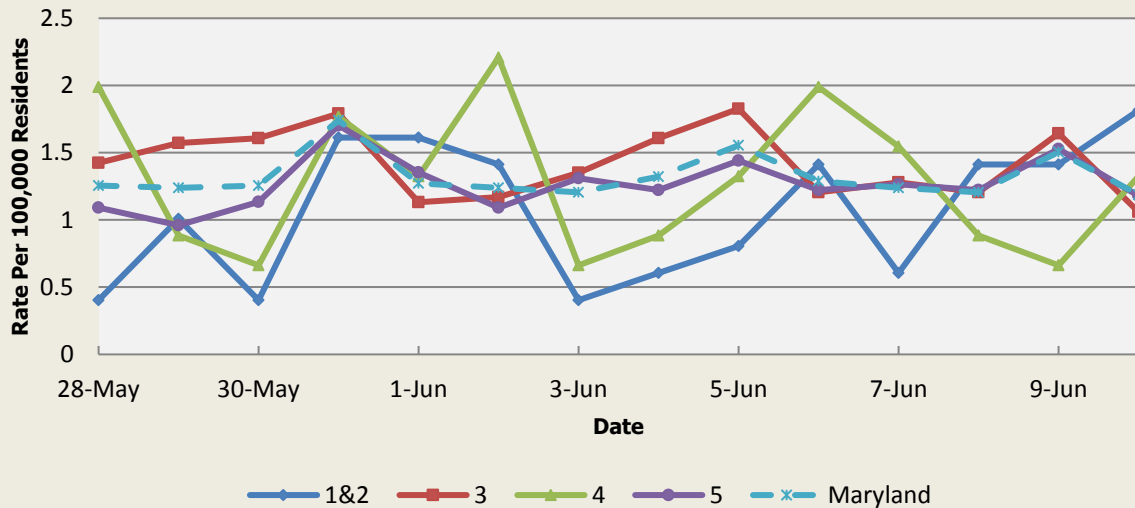


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.71	4.83	2.69	8.32	5.91
Median Rate*	3.23	4.38	2.43	8.03	5.52

\* Per 100,000 Residents

### Over-the-Counter Thermometer Sales Rate Per 100,000 Residents



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

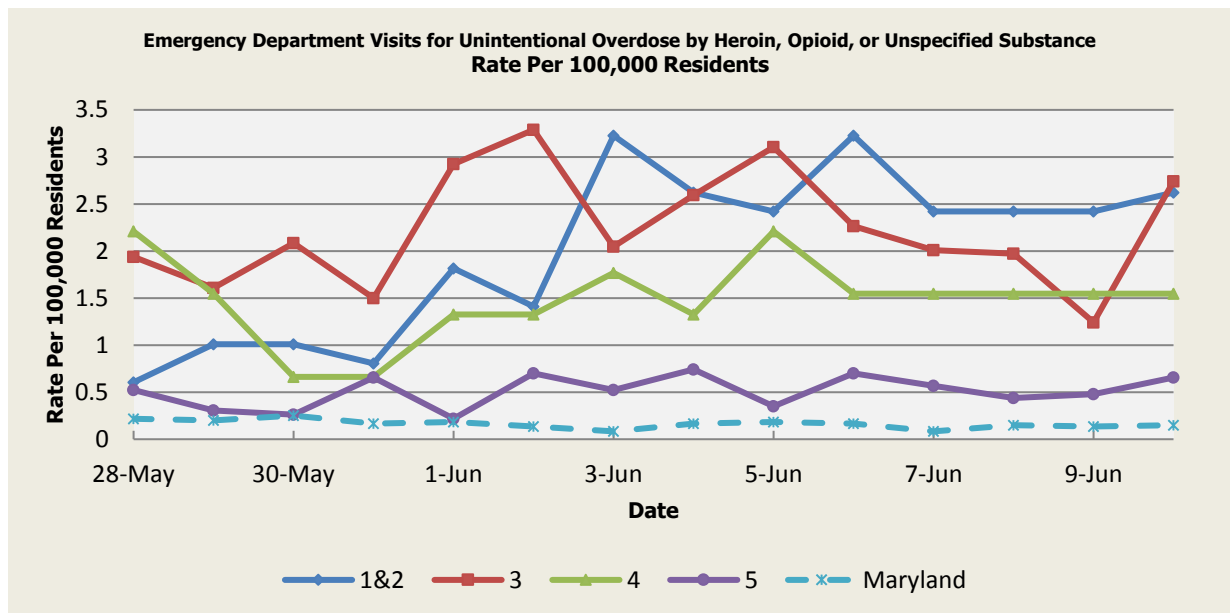
Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.32	3.18	2.46	4.26	3.55
Median Rate*	3.02	3.03	2.43	4.06	3.36

\* Per 100,000 Residents



## SYNDROMIC OVERDOSE SURVEILLANCE

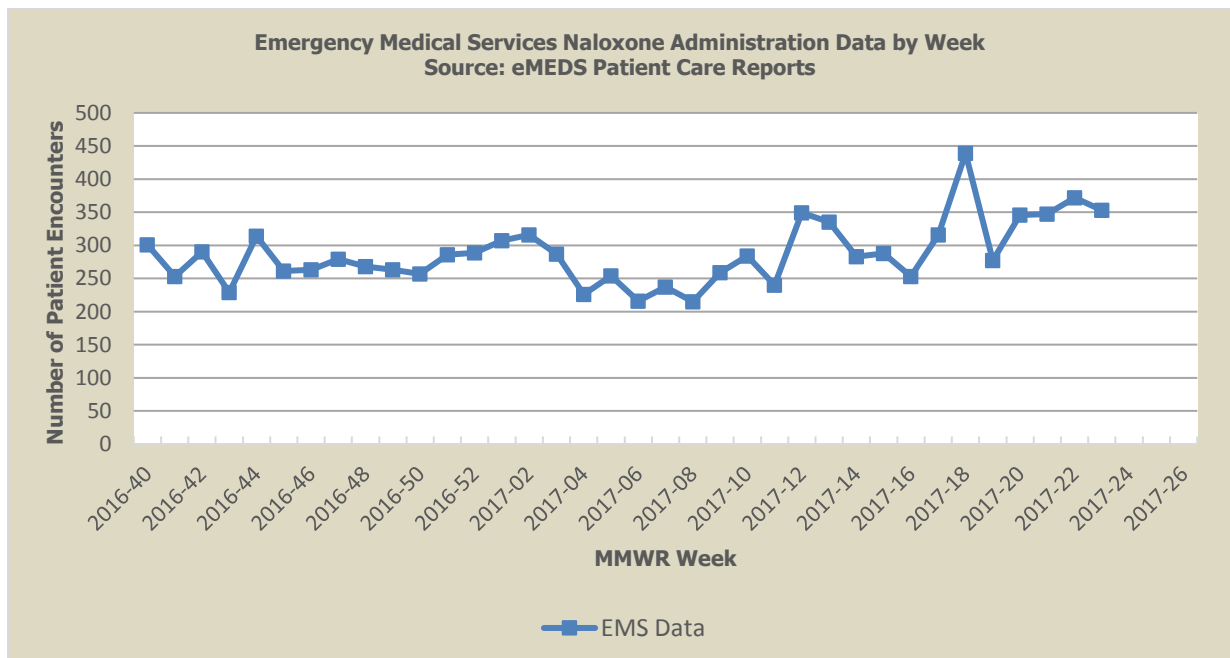
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



**Disclaimer on ESSENCE Overdose related data:** ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.32	0.41	0.37	0.15	0.30
Median Rate*	1.01	1.32	1.10	0.48	0.99

\* Per 100,000 Residents



**Disclaimer on eMEDS naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase:** This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of May 16, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 859, of which 453 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

### **AVIAN INFLUENZA:**

**HPAI H5N8 (LUXEMBOURG)** 10 June 2017, Highly pathogenic avian influenza, Luxembourg. Read More: <http://www.promedmail.org/post/5095921>

**UNDIAGNOSED AVIAN FLU (USA)**, 15 June 2017, Young seagulls pitching camp near Jefferson Avenue are dying off en masse, and the Department of Natural Resources isn't quite sure why. Residents and commuters reported the deaths, some claiming to have seen at least 100 bloodied and rotting bird carcasses at a time littering the roadway throughout the last week. The birds are young. They have been picked at, and their bodies are everywhere. Read More: <https://www.promedmail.org/post/5108279>

### **HUMAN AVIAN INFLUENZA:**

**H7N9 (CHINA)** 11 June 2017, A man has been confirmed infected with the H7N9 bird flu virus, following the infection of his wife in northwest China's Shaanxi province. The man, aged 67 years, is a farmer in neighboring Inner Mongolia Autonomous Region. He tested positive for the virus in Yulin city, after days of high fever and coughing at his hometown nearby, the city's disease control center said in a statement. It is the 2nd H7N9 human infection case in the city, the 1st being his 62-year-old wife, who was confirmed with the virus on [Wed 31 May 2017]. Both had been exposed themselves to dead poultry before showing symptoms, the statement said. The couple is being treated in a local hospital in Yulin. Read More: <http://www.promedmail.org/post/5093273>

### **NATIONAL DISEASE REPORTS**

**DRUG ABUSE – POTENTIALLY LETHAL UNKNOWN SUBSTANCE (GA)** 10 June 2017, Local Atlanta news has reported several overdose cases of the use opioid products "laced" with fentanyl. WSB Channel News reported this week [week of 4-10 Jun 2017] that yellow pills stamped with the name "Percoset" on them were actually fentanyl pills; these pills led to at least one death. Read More: <http://www.promedmail.org/post/5095236>

**TULAREMIA (MN)**, 11 June 2017, It's a rare disease in Minnesota, with only 3 reported human cases in 2016, but Minnesota Department of Health warns cases of tularemia could be on the rise. "It's still

uncommon, but over the last several years we are starting to see more and more cases," said Kirk Smith with the Minnesota Department of Health. Last week, health officials reported the first tularemia case of 2017 in Burnsville after an infected cat passed the bacterium to a person. Read More:

<http://www.promedmail.org/post/5098241>

**WEST NILE VIRUS (KY)** 15 June 2017, The Kentucky State Veterinarian's office has announced that a horse from Bourbon County has tested positive for West Nile virus (WNV). This is the 1st equine WNV case confirmed in the commonwealth this year. In a statement Kentucky Equine Programs manager E.S. "Rusty" Ford said the case was confirmed. Read More: <https://www.promedmail.org/post/5108455>

**PLAGUE, FELINE (CO)** 15 June 2017, A domestic cat in rural northwest Weld County has tested positive for plague. The cat became sick in early June and is receiving treatment, according to a Wednesday news release from the Weld County Department of Public Health and Environment. The cat is expected to make a full recovery, and the owner is taking preventive antibiotics. Weld County has taken the lead on the case, but the home is near the Larimer-Weld county line. Read More:

<https://www.promedmail.org/post/5108564>

## **INTERNATIONAL DISEASE REPORTS**

**CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN)** 11 Jun 2017, AK, a patient who was brought to the Pakistan Institute of Medical Sciences (PIMS) for treatment of Hepatitis on has been confirmed by the National Institute of Health as suffering from Crimean Congo Hemorrhagic Fever (CCHF). Read More: <http://www.promedmail.org/post/5094216>

**ANTIBIOTIC RESISTANT MRSA (DENMARK)** 11 June 2017, A new report from the State Serum Institute (SSI) has revealed that Denmark saw the highest ever number of cases involving the antibiotic-resistant bacteria MRSA last year. The report showed there were 3550 new cases in 2016 - a considerable jump from the 2973 instances that occurred in 2015. According to SSI, asylum-seekers accounted for part of the increase. Read More: <http://www.promedmail.org/post/5098312>

**HEPATITIS E (INDIA)** 12 June 2017, The doctors have confirmed an outbreak of hepatitis E at Ahmadabad village of south Kashmir's Kulgam district, due to the supply of highly contaminated water to the inhabitants. 5 people in the village have so far been tested positive for the infection. "As soon as we received the reports of jaundice cases in the village Ahmadabad we deputed a medical team," said Block Medical Officer (BMO), DH Pora Dr Zahoor Ahmad. He said 8 people were found to have jaundice and their blood samples were taken for testing to Integrated Disease Surveillance Program (IDSP) laboratory in Barzulla Srinagar. "Out of 8, 5 have so far tested positive for hepatitis E infection while the reports of other suspected cases is awaited. Read More: <http://www.promedmail.org/post/5099614>

**HEPATITIS E (NIGER)** 13 June 2017, The epidemic of hepatitis E reported in April 2017 in the Diffa region in southeastern Niger has left 33 deaths out of a total of 766 cases of this disease, representing a mortality rate of 4.3 percent. The figures were communicated in the latest report of the UN Office of Humanitarian Affairs (OCHA), which points out that the main focus of the epidemic is in the city of Diffa, capital of the province of the same name, where there are 230 cases. Women are particularly affected, accounting for 61 percent of cases compared to 39 percent of men. Read More:

<https://www.promedmail.org/post/5102098>

**ANTHRAX (ROMANIA)** 14 June 2017, A 47-year-old Romanian man diagnosed with anthrax was admitted to the Botosani County Hospital in northern Romania. Health authorities confirmed the diagnosis after lab tests, and other samples were sent for re-evaluation at the Cantacuzino Institute in Bucharest, reports local News.ro. The man is currently in a stable condition and hospitalized in the Department of Infectious Diseases of the County Emergency Hospital, according to representatives of the Botosani Public Health Directorate. He contracted the disease from one of his cows. Read More:

<https://www.promedmail.org/post/5105743>

**BOTULISM (MOROCCO)** 15 June 2017, Three cases of foodborne illnesses have recently been recorded in a family in Ouarzazate, which led to the death of the mother and her daughter. According to the National Office of Food Safety (ONSSA), these cases are due to the bacterium *Clostridium*

*botulinum* which was found in the samples analyzed by the Office's services. The Office is expected to disclose the identity of the product in question for the safety of consumers. Read More:

<https://www.promedmail.org/post/5108584>

**MERS-COV (SAUDI ARABIA)** 15 June 2017, As of 15 June 2017, there are 1663 laboratory-confirmed cases of MERS-CoV infection, including 670 deaths with a reported case fatality rate of 40.3 percent, 944 recoveries, and 49 currently active cases/infections. Read More:

<https://www.promedmail.org/post/5108781>

**UNDIAGNOSED ACUTE RESPIRATORY ILLNESS, FATAL (COLOMBIA)** 15 June 2017, To date, the National Health Institute has reported 195 deaths per acute respiratory infection in children under 5 years of age. The places where they have presented are Cundinamarca, Valle del Cauca and Bogota, Putumayo, Nariño, Norte de Santander, La Guajira, Córdoba, Magdalena, Guainía, Bolívar and Cauca. In Guainía, Chocó and Vaupés have the highest mortality in children under 5 with 75.5, 23.0 and 16.6 respectively [per 100 000]. More than 3.1 million outpatient and emergency room records have been reported for this disease. Read More: <https://www.promedmail.org/post/5108810>

## OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/> or follow us on Facebook at [www.facebook.com/MarylandOPR](http://www.facebook.com/MarylandOPR).

More data and information on influenza can be found on the DHMM website:  
<http://phpa.dhmm.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.dhmm.maryland.gov>  
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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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## Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

## Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

